

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An electrode sealing assembly designed for use with an electrosurgical instrument for sealing tissue, comprising: first and second jaw members each having an electrically insulative housing including at least one electromechanical interface and being movable from a first position in spaced relation relative to one another to at least one second position for grasping tissue therebetween, each of the jaw members including: an electrically conductive sealing plate having at least one corresponding electromechanical interface which mates with the electromechanical interface of the insulative housing; a thermally conductive, electrically non-conductive material disposed between the insulative housing and the electrically conductive sealing plate, the thermally conductive, electrically non-conductive material configured to engage at least one side of said sealing plate,

wherein the thermally conductive, electrically non-conductive material of at least one jaw member includes projections that extend laterally therefrom.

2. (Currently amended) An electrode sealing assembly according to claim 1 wherein said thermally conductive, electrically non-conductive material is configured to encapsulate and secure the sealing plate to the electrically insulative housing.

3. (Original) An electrode sealing assembly according to claim 1 wherein the thermally conductive, electrically non-conductive material of at least one jaw member includes first and

second segments which join to encapsulate the sealing plate.

4. (Currently amended) An electrode sealing assembly according to claim 1 wherein the electrically insulative housing of at least one jaw member is made from a material selected from the group consisting of: nylon, syndiotactic-polystyrene, polybutylene terephthalate, polycarbonate, acrylonitrile butadiene styrene, polyphthalamide, polyimide, polyethylene terephthalate, polyamide-imide, acrylic, polystyrene, polyether sulfone, aliphatic polyketone, acetal copolymer, polyurethane, nylon with polyphenylene-oxide dispersion and acrylonitrile styrene acrylate.

5. (Original) An electrode sealing assembly according to claim 1 wherein the thermally conductive, electrically non-conductive material of at least one jaw member is at least one of thermally conductive plastic and anodized aluminum.

Claim 6 (Cancelled).

7. (Currently amended) An electrode sealing assembly according to claim 1 wherein the electrically conductive sealing surface plate of at least one jaw member includes at least one stop member for controlling the distance between jaw members.

8. (Original) An electrode sealing assembly according to claim 1 wherein the electrically conductive sealing plate and the thermally conductive, electrically non-conductive material of at least one jaw member include tissue contacting surfaces which are substantially

flush relative to one another.

9. (Original) An electrode sealing assembly according to claim 1 wherein the jaw members are disposed at an angle relative to a shaft of the electrosurgical instrument.
10. (Original) An electrode sealing assembly according to claim 1 wherein the electrode sealing assembly is disposable.
11. (Currently amended) An electrode sealing assembly according to claim 1 wherein the electrically insulative housing of at least one jaw member includes a support step which extends relative to an upper surface of the insulative housing, the support step being dimensioned to support the sealing plate thereon.
12. (Currently amended) An electrode sealing assembly designed for use with an electrosurgical instrument for sealing tissue, comprising: first and second jaw members being movable from a first position in spaced relation relative to one another to at least one second position for grasping tissue therebetween, each of the jaw members including: an electrically insulative housing having at least one electromechanical interface; an electrically conductive sealing plate having at least one corresponding electromechanical interface which mates with the electromechanical interface of the insulative housing, at least one of the sealing plates of at least one of the jaw members including at least one stop member which extends therefrom; and first and second thermally conductive, electrically non-conductive segments disposed between the insulative housing and the electrically conductive sealing plate, the thermally conductive,

electrically non-conductive segments being joinable to encapsulate and secure the sealing plate to the insulative housing,

wherein the thermally conductive, electrically non-conductive material of at least one jaw member includes projections that extend laterally therefrom.

13. (Currently amended) An electrode sealing assembly designed for use with an electrosurgical instrument for sealing tissue, comprising: first and second jaw members being movable from a first position in spaced relation relative to one another to at least one second position for grasping tissue therebetween, each of the jaw members including: an electrically conductive sealing plate; and a thermally conductive, electrically non-conductive material being configured to engage a side of the sealing plate,

wherein the thermally conductive, electrically non-conductive material of at least one jaw member includes projections that extend laterally therefrom.

14. (Currently amended) An electrode sealing assembly according to claim 13 wherein said thermally conductive, electrically non-conductive material is configured to encapsulate and secure the sealing plate to ~~[[the]]~~ an electrically insulative housing.